REMARKS

Claims 1-12, 14-19 and 21-29 are pending. Claims 1, 8, 10-11, 14, 19 and 25 are amended herein. No new matter is added as a result of the claim amendments.

112 Rejections

The instant Office Actions states that Claims 1-7, 19 and 21-29 are rejected under 35 U.S.C. § 112, second paragraph, because the phrase "provided less than all of the macro-blocks are characterized as intra coded" is unclear. Generally, this phrase is interpreted as meaning "if not all of the macroblocks are characterized as intra-coded." Applicants respectfully submit that the plain meaning of the claims is clear, particularly as the claims are amended, and respectfully request that the rejection of Claims 1-7, 19 and 21-29 are rejected under 35 U.S.C. § 112, second paragraph, be withdrawn.

103 Rejections

Claims 1-4, 7-11, 14, 16-19, 21 and 23-24

The instant Office Actions states that Claims 1-4, 7-11, 14, 16-19, 21 and 23-24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Brusewitz (U.S. Patent Application Publication 2003/0021345) in view of Uenoyama et al. ("Uenoyama;" U.S. Patent No. 6,798,837). The Applicants have reviewed the cited references and respectfully submit that the present invention as recited in Claims 1-4, 7-11, 14, 16-19, 21 and 23-24 is not anticipated nor rendered obvious by Brunewitz and Uenoyama, alone or in combination.

Applicants respectfully agree with the statement in the instant Office Action to the effect that Brusewitz does not show or suggest selecting a data processing function according to the number of macroblocks characterized as

intra-coded as recited in independent Claim 1 and as similarly recited in independent Claims 8 and 19. Uenoyama is cited to overcome this deficiency.

According to the claimed embodiments, a subset of macroblocks (e.g., K macroblocks) is to be used to generate one output macroblock (please see the discussion beginning at line 9 on page 9 of the instant application). According to the claimed embodiments, the number of macroblocks in the subset that are characterized as intra-coded are counted and, if that number satisfies the conditions recited in the claims, then a certain processing function is selected (namely, the subset of macroblocks is downsampled in the compressed domain).

In contrast to the claimed embodiments, and as understood by the Applicants, Uenoyama only describes counting the number of intra-coded macroblocks in the unit of a picture (which may be the equivalent of a frame). In general, Uenoyama appears to pertain to a method for converting video that is compressed according one compression scheme into video that is compressed according to another compression scheme. As part of this conversion process, Uenoyama makes a determination as to whether an output picture should be characterized as inter-coded or intra-coded. As understood by the Applicants, Uenoyama makes this determination by simply counting the number of macroblocks in the picture that are characterized as intra-coded (please see the discussion of Figure 4B of Uenoyama beginning at column 8, line 54).

Applicants respectfully note that, according to the present claimed invention and in contrast to the cited references, one is not simply counting the macroblocks in any subset, but specifically a subset of macroblocks that is to be encoded as one macroblock. Furthermore, according to the present

claimed invention, the count within the defined subset is compared to thresholds, and based on the comparison processing decisions are made for the defined subset. The cited prior art references do not show this degree of granularity.

The instant Office Action also refers to Figure 24 of Uenoyama. However, Applicants respectfully note that, according to the discussion starting at line 14 in column 26 of Uenoyama, it is the total number of coding operations – not a number of macroblocks characterized as intra-coded – that is being counted.

In summary, Applicants respectfully submit all of the limitations of independent Claims 1, 8 and 19 are not shown or suggested by the cited portions of Uenoyama, nor Uenoyama in its entirety, alone or in combination with Brusewitz. Claims 2-4 and 7 are dependent on Claim 1 and recite additional limitations. Claims 9-11, 14 and 16-18 are dependent on Claim 8 and recite additional limitations. Claims 21 and 23-24 are dependent on Claim 19 and recite additional limitations.

Therefore, Applicants respectfully submit that the basis for rejecting Claims 1-4, 7-11, 14, 16-19, 21 and 23-24 under 35 U.S.C. § 103(a) is traversed.

Claims 5-6, 12, 15, 22 and 25-29

The instant Office Actions states that Claims 5-6, 12, 15, 22 and 25-29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Brusewitz and Uenoyama further in view of Vetro et al. ("Vetro;" U.S. Patent No. 6,671,322). The Applicants have reviewed the cited references and respectfully submit that the present invention as recited in Claims 5-6, 12, 15,

22 and 25-29 is not anticipated nor rendered obvious by Brunewitz, Uenoyama and Vetro, alone or in combination.

As presented above, Applicants respectfully assert that Brusewitz and Uenoyama, alone or in combination, do not show or suggest all of the limitations of independent Claims 1, 8 and 19. By similar rationale, Applicants respectfully submit that Brusewitz and Uenoyama, alone or in combination, do not show or suggest all of the limitations of independent Claim 25.

Applicants respectfully submit that Vetro does not overcome the shortcomings of Brusewitz and Uenoyama. That is, Applicants respectfully submit that Vetro, alone or in combination with Brusewitz and Uenoyama, does not show or suggest counting the number of intra-code macroblocks in a subset of macroblocks and, if that number satisfies the conditions recited in the claims, selecting a certain processing function (namely, downsampling the subset of macroblocks in the compressed domain).

In summary, Applicants respectfully submit that Brusewitz, Uenoyama and Vetro, alone in combination, do not show or suggest all of the limitations of independent Claims 1, 8, 19 and 25. Claims 5-6 are dependent on Claim 1 and recite additional limitations. Claims 12 and 15 are dependent on Claim 8 and recite additional limitations. Claim 22 is dependent on Claim 19 and recites additional limitations. Claims 26-29 are dependent on Claim 25 and recite additional limitations.

Therefore, Applicants respectfully submit that the basis for rejecting Claims 5-6, 12, 15, 22 and 25-29 under 35 U.S.C. § 103(a) is traversed.

Conclusions

In light of the above remarks, Applicants respectfully request reconsideration of the rejected claims.

Based on the arguments presented above, Applicants respectfully assert that Claims 1-12, 14-19 and 21-29 overcome the rejections of record, and therefore Applicants respectfully solicit allowance of these claims.

Applicants have reviewed the reference cited but not relied upon, and did not find this reference to show or suggest the present claimed invention: U.S. Patent No. 5,825,927.

The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Respectfully submitted,

WAGNER, MURABITO & HAO LLP

Date: 4/26/06

John P. Wagner, Jr.
Reg. No. 35,398

Two North Market Street
Third Floor
San Jose, California 95113
(408) 938-9060